UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,650	10/30/2000	T. Paul Gaske	PD-990272	7749

20991	7590	02/19/2004

HUGHES ELECTRONICS CORPORATION
PATENT DOCKET ADMINISTRATION RE/R11/A109
P O BOX 956
EL SEGUNDO, CA 90245-0956

EXAMINER
BOWES, SARA E

ART UNIT	PAPER NUMBER
2136	

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	09/699,650	GASKE ET AL.
	Examiner	**Art Unit**	
	Sara Bowes	2136	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
  closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-29</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-29</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Specification

The use of the trademark DIRECTV™ and Pentium™ has been noted in this

application. It should be capitalized wherever it appears and be accompanied by the

generic terminology.

Although the use of trademarks is permissible in patent applications, the

proprietary nature of the marks should be respected and every effort made to prevent

their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

Claim 26 is objected to because of the following informalities: misspelling.

Referring to claim 26, line 8, cashes is misspelled, it is suggested that it be

replaces with caches.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 10, 13-18 are rejected under 35 U.S.C. 102(a/e) as being anticipated by U.S. Patent No. 5,933,500 to Blatter et al..

Referring to claim 1, Blatter et al. teach an apparatus for performing background caching of encrypted programming for later playback, comprising:

- a memory operatively connected to a bus for storing received, encrypted digital data packets of at least one pay-per-view (PPV) event [column 3, lines 26-28];

- a processor [DES decryption unit 50] for decrypting the data packets when they are transferred by said memory via said bus [figure 4, steps 515 and 520 and column 13, lines 59-61].

- a decoder for decoding said decrypted data packets for display on a display device [figure 1, AUDIO DECODER 80, VIDEO DECODER 85], and

- wherein the apparatus searches and caches data packets of said at least one PPV event when in a power-down mode, and plays back a recorded PPV event in a power-up mode upon selection by a user [figure 2, Step 210].

Referring to claim 2, Blatter et al. teach the apparatus according to claim 1, further comprising a recording device for digitally recording said encrypted digital data packets, and for transmitting said digitally recorded data packets to said memory [figure 1, STORAGE DEVICE 90].

Referring to claim 3, Blatter et al. teach the apparatus according to claim 2, wherein the recording device includes at least one mass storage device [figure 1, STORAGE MEDIUM 105].

Referring to claim 4, Blatter et al. teach the apparatus according to claim 3, wherein said mass storage device is at least one of a hard disc drive, magnetic storage device or optical storage medium [figure 1, STORAGE MEDIUM 105].

Referring to claim 5, Blatter et al. teach the apparatus according to claim 2, wherein said processor is a transport processor operatively connected to said bus and to an input port for receiving said encrypted digital data packets from said input port [figure 1, TRANSPORT SYSTEM 25].

Referring to claim 10, Blatter et al. teach the apparatus according to claim 5, wherein the transport processor provides an additional layer of conditional access for the encrypted digital data packets, if desired [column 9, lines 54-61].

Referring to claim 11, Blatter et al. teach the apparatus according to claim 1, wherein the data packets are time stamped upon reception [column 7, lines 19-23].

Referring to claim 12, Blatter et al. teach the apparatus according to claim 5,

- wherein the data packets are time-stamped upon reception [column 7, lines 19-23], and

- wherein the decoder and transport processor utilize the recorded time stamps to recreate the original transmission timing of the encrypted digital data packets, only when the user selects a recorded PPV event for playback [column 7, lines 25-32].

Referring to claim 13, Blatter et al. teach the apparatus according to claim 1, wherein the memory stores encrypted digital data of a plurality of PPV events in repetition while the apparatus is in the power-down mode, and wherein the user only pays for those recorded PPV events that are selected for playback in the power-up mode [column 14, lines 30-35].

Referring to claim 14, Blatter et al. teach the apparatus according to claim 2, wherein said recording device is an external storage medium [figure 1, STORAGE DEVICE 90].

Referring to claim 15, Blatter et al. teach the apparatus according to claim 5, wherein the transport processor decrypts said encrypted digital data packets of the User-selected PPV event, and sends the decrypted data packets to said decoder via said interface [figure 1, DES DECRYPTION 50 and column 3, lines 33-43, column 4, lines 49-53].

Referring to claim 16, Blatter et al. teach the apparatus according to claim 15, wherein said decoder includes an MPEG A/V decoder for decoding the video portion of said decrypted digital data packets, and an AC-3/MPEG audio decoder for decoding the audio portion of said decrypted digital data packets [figure 1, AUDIO DECODER 80, VIDEO DECODER 85].

Referring to claim 17, Blatter et al. teach the apparatus of claim 16, further comprising a video encoder that converts the received video portion of the decrypted digital data packets to analog for display [column 3, lines 33-35].

Referring to claim 18, Blatter et al. teach the apparatus of claim 1, wherein the apparatus is configured as a set top box (STB) equipped with a digital video recorder [figure 1].

Referring to claim 19, Blatter et al. teach a method for background caching encrypted programming for later playback in a digital video recording (DVR) system, comprising:

- storing received, encrypted digital data packets of at least one pay-per-view (PPV) event in a memory [column 3, lines 26-28],
- time-stamping the received data packets upon reception [column 7, lines 19-23];

- decrypting the data packets when they are transferred by said memory via a bus [figure 4, steps 515 and 520 and column 13, lines 59-61]; and

- decoding said decrypted data packets for display on a display device [figure 1, AUDIO DECODER 80, VIDEO DECODER 85],

- wherein said at least one PPV event is searched for, and its corresponding data packets and cached, when the DVR system is in a power-down mode [figure 2, Step 210], and

- wherein a selected PPV event is played back when the DVR system is in a power-up mode, upon selection by a user [column 13, lines 5-9].

Referring to claim 20, Blatter et al. teach the method according to claim 19, wherein said step of storing is repeated for a plurality of PPV events when the DVR system is in said power-down mode [column 3, line 26].

Referring to claim 21, Blatter et al. teach the method according to claim 20, wherein the user only pays for those cached PPV events that are selected for playback in the power-up mode [column 14, lines 34-35].

Referring to claim 24, Blatter et al. teach the method according to claim 19, further comprising decrypting said encrypted digital data packets of the user-selected PPV event, wherein said decryption is performed in a transport processor operatively connected to said memory via said bus [figure 4, step 505, 510, and 515].

Referring to claim 25, Blatter et al. teach the method according to claim 19, wherein said step of decoding includes utilizing said recorded time stamps to recreate the original transmission timing of the encrypted digital data packets, only when the user selects a recorded PPV event for playback [column 7, lines 25-32].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-9, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent No. 5,933,500 to Blatter et al. in view of U.S. Patent No. 6,233,389 to

Bartone et al.

Referring to claim 6, Blatter et al. teach the apparatus according to claim 5,

further comprising:

- said host processor directing said memory to transfer said encrypted digital data

  packets to be digitally recorded by said recording device [column 12, lines 20-

  26].

Blatter et al. do not teach the apparatus according to claim 5, further

comprising:

- a host processor operatively connected to said bus and said memory for

  performing graphics-user interface and browser functions,

- an interface for receiving said encrypted digital data packets from said transport

  processor, and for transferring said received encrypted digital data packets

  simultaneously to said memory via said bus, and to said decoder,

- said memory further including a buffer space for temporarily storing the

  encrypted digital data packets received from said interface, and

- said interface adapted to receive said digitally recorded data packets from said

  recording device via said memory and said bus [column 4, lines 21-22].

However, Barton et al. disclose the apparatus according to claim 5, further

comprising:

- a host processor operatively connected to said bus and said memory for

  performing graphics-user interface and browser functions [column 4, line 6],

- an interface [Media Switch] for receiving said encrypted digital data packets from

  said transport processor, and for transferring said received encrypted digital data

  packets simultaneously to said memory via said bus, and to said decoder

  [column 3, line 67- column 4, line 2],

- said memory further including a buffer space for temporarily storing the

  encrypted digital data packets received from said interface [column 3, lines 65-

  66], and

- said interface adapted to receive said digitally recorded data packets from said

  recording device via said memory and said bus [column 4, lines 21-22].

  It would have been obvious to one of ordinary skill in the art at the time the

invention was made to apply Barton et al.'s teaching of an interface and a graphics-user

interface to the system and method of Blatter et al, such that Blatter et al.'s system

would include a Media Switch module 102, figure 1 of Barton et al. within the

TRANSPORT SYSTEM 25 and would display an on-screen display for searching a

program. One would have been motivated to modify Blatter et al.'s system as such in

order to provide for my ease and flexibility of program viewing.

Referring to claim 7, Blatter et al. as modified teach the apparatus according to

claim 6, said interface being further adapted to transfer said digitally recorded data

packets to said decoder [figure 7, MPEG decoder 715 and audio decoder 717 of Barton

et al.].

Referring to claim 8, Blatter et al. as modified teach the apparatus according to

claim 6, wherein said host processor searches a program guide to find upcoming PPV

events, and, when said PPV event begins, the apparatus tunes to an appropriate

transponder to begin receiving the encrypted digital data packets [column 3, lines 23-26

of Barton et al.].

Referring to claim 9, Blatter et al. as modified teach the apparatus according to

claim 8, wherein the digital data packets include packetized audiovisual data [figure 3 of

Barton et al.], system time data [PCRs (column 7, lines 16-19)] and conditional access

data [CAT (column 8, lines 35-37)].

Referring to claim 22, Blatter et al. teach all limitations of claim 22 except the

method wherein said searching includes searching a program guide to find upcoming

PPV events, and, when said PPV event begins, the DVR system tunes to an

appropriate transponder to begin receiving the encrypted digital data packets.

However, Barton et al. disclose the method wherein said searching includes

searching a program guide to find upcoming PPV events, and, when said PPV event

begins, the DVR system tunes to an appropriate transponder to begin receiving the

encrypted digital data packets [column 3, lines 23-26].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Barton et al.'s teaching of a graphics-user interface and the ability search using the GUI to the system and method of Blatter et al, such that Blatter et al.'s controller 115 of figure 1 would display a searchable on-screen display for searching a program. One would have been motivated to modify Blatter et al.'s system as such in order to provide for my ease and flexibility of program viewing.

Referring to claim 23, Blatter et al. as modified teach the method according to claim 22, wherein said searching is performed by a host processor in the DVR system [column 4, lines 3-9 of Barton et al.].

Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,933,500 to Blatter et al. in view of U.S. Patent No. 5,850,218 to LaJoie et al.

Referring to claim 26, Blatter et al. teach a set-top box (STB) for performing background caching of encrypted programming for later playback, comprising:

- storing means for caching the received encrypted data packets for later playback [column 3, lines 38-39]; and

- retrieval means for retrieving said data packets for display [figure 1, STORAGE DEVICE 90 and column 3, line 39-41],

- wherein the searching means searches and said storing means cashes data packets of said at least one PPV event when the STB is in a power-down mode [figure 2, Step 210], and plays back a recorded PPV event when the STB is in a power-up mode [column 13, lines 5-9].

Blatter et al. do not teach a set-top box (STB) comprising:

- searching means for searching a program guide to find upcoming pay-per-view (PPV) events received as encrypted data packets.

However, LaJoie et al. disclose a set-top box (STB) comprising:

- searching means for searching a program guide to find upcoming pay-per-view (PPV) events received as encrypted data packets [figure 13].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply LaJoie et al.'s teaching of a searching means for searching a program guide to the system and method of Blatter et al., such that Blatter et al.'s system would display an on-screen display for searching a program guide. One would have been motivated to modify Blatter et al.'s system as such in order to allow the user to easily search an on-screen program guide.

Referring to claim 27, Blatter et al. as modified teach the STB of claim 26, wherein said searching means and said storing means repeat searching and recording for a plurality of PPV events, said recorded plurality of PPV events being stored on an external storage medium for later playback [column 3, line 26].

Referring to claim 28, Blatter et al. as modified teach the STB of claim 26,

- wherein said encrypted digital data packets are time-stamped upon reception [column 7, lines 19-23], and

- wherein said retrieval means decrypts said encrypted digital data packets, uses the recorded time stamps to recreate the original transmission timing data of the data packets, and decodes the decrypted digital data packets for display on a display device [column 7, lines 25-32].

Referring to claim 29, Blatter et al. as modified teach the STB of claim 26, wherein a user only pays for those cached PPV events that are selected for playback in the power-up mode [column 14, lines 34-35].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,642,939 to Vallone et al.;

U.S. Patent No. 6,490,722 to Barton et al.;

U.S. Patent No. 5,539,660 to Blair et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Bowes whose telephone number is 703-305-0326. The examiner can normally be reached on 7:30-4:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

seb
2/12/04

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100